High-Performance Polymers for
Single-Use Biopharma Processing Technologies
Enabling Life-Changing Technology

Single-use technology has been one of the most significant changes in biopharmaceutical manufacturing over the past 20 years. Key driving factors include greater flexibility, reduced resources for cleaning and cleaning validation, and faster turnaround between products and batches, resulting in reduced capital costs and increased speed to market.

Peripherals, containers and filtration media used in single-use systems have different performance requirements that benefit from Solvay’s broad range of biocompatible, gamma-stable, high-performance polymers.

Key Benefits

- Diverse portfolio of gamma stable, medical-grade polymers
- USP Class VI & ISO 10993 biocompatible
- Leachable & extractable post gamma radiation testing
- High/low temperature stability, strong mechanical properties
- Hydrophobic and hydrophilic materials for filtration
- BPOG leachable/extractable test protocols for worst case scenario
- ISO 17025 testing laboratories

With over 30 years of experience as a leading materials supplier to the healthcare industry, Solvay provides the reliability, experience and innovation that manufacturers expect from their partners. Our global technical and regulatory support is tailored to meet the unique demands of your project.

Gamma-Stable, High-Performance Polymers*

- Udel® PSU (polysulfone)
- Veradel® HC PESU (polyethersulfone)
- Radel® PPSU (polyphenylsulfone)
- AvaSpire® PAEK (polyaryletherketone)
- KetaSpire® PEEK (polyetheretherketone)
- Ixef® PARA (polyarylamide)

Diverse Performance Requirements

Peripherals

- Connectors, valves, clamps
- Tubings
- Gaskets, O-rings
- Sensor housings and components
- Stirring and mixing elements
- Needles, sheaths, housings

Filtration

- Membranes
- Membrane additives
- Membrane supports and housings

Bioreactors and containment

- Bioreactors
- Final product and other bags

* All polymers are inherently gamma stable up to 50 kGY with regard to mechanical properties except for Ixef® PARA, which has been gamma-stabilized.